

✓ RoHS & CE	✓ UL 94V-0/V-2
✓ Fluke Tested	✓ OEM / ODM

CAT6 RJ45 CONNECTOR SERIES

Cat6 Unshielded Pass-Through RJ45 Connector - Staggered Double-Row 8P8C UTP Modular Plug with 50µ" Gold Plating

Online Product Page:
https://www.hxplug.com/cat6-unshielded-pass-through-rj45-staggered-connector/

KEY PRODUCT HIGHLIGHTS

- Effortless Pass-Through Design: Simplifies termination by allowing wires to feed through the front of the connector for easy sequence verification.
- Staggered Double-Row Layout: The 4-up/4-down staggered internal geometry reduces Near-End Crosstalk (NEXT) for superior signal integrity.
- Industrial-Grade Gold Plating: 50µ" thick gold-plated phosphor bronze contacts ensure maximum conductivity and resistance to oxidation.
- High-Quality PC Material: Manufactured from eco-friendly, high-impact polycarbonate (UL 94V-2/V-0) for maximum durability and flexibility.
- Universal Compatibility: Designed for Category 6 unshielded (UTP) cables, supporting 23-24 AWG solid and stranded copper wires.

TECHNICAL SPECIFICATIONS & PARAMETERS

Parameter	Specification / Standard
Product Model	HX-C6-UTP-PT-STG
Category Standard	Category 6 (Cat6)
Connector Type	RJ45 8P8C Pass-Through
Shielding Type	UTP (Unshielded Twisted Pair)
Internal Geometry	Staggered Double-Row (4-Up / 4-Down)
Gold Plating	Premium 50µ" (Micron)
Housing Material	High-Impact Polycarbonate (Clear)
Contact Material	Phosphor Bronze
Wire Gauge Support	23AWG - 24AWG
Max Speed	1000 Mbps (1 Gbps)
Operating Temp	-40°C to +85°C

ENGINEERING OVERVIEW & APPLICATIONS

The Cat6 Unshielded Pass-Through RJ45 Connector is the ultimate solution for networking professionals and DIY enthusiasts who demand speed, accuracy, and performance. In traditional "blind" connectors, getting the wire sequence correct and ensuring the jacket is properly seated is a constant challenge. Our pass-through design eliminates these headaches by allowing you to slide the wires all the way through the plug, verifying the T568A or T568B color code before you crimp.

As network speeds increase to Gigabit and beyond, interference becomes a major obstacle. The Cat6 Unshielded Pass-Through RJ45 Connector utilizes a specialized staggered double-row (4-up/4-down) pin arrangement. Unlike standard Cat5e plugs where wires are aligned in a single flat row, this staggered layout increases the physical distance between the conductors inside the plug. This engineering choice is vital for meeting Category 6 standards, as it drastically minimizes Near-End Crosstalk (NEXT) and Return Loss, ensuring your network operates at peak 250MHz bandwidth without data packet loss.

Not all modular plugs are created equal. Many competitors use thin 3µ" gold plating that wears away after just a few insertions. Our Cat6 Unshielded Pass-Through RJ45 Connector features industrial-standard 50µ" gold-plated contacts. This ensures a low-resistance connection that can withstand over 750 mating cycles without signal degradation. Whether you are installing a high-density patch panel in a data center or wiring a smart home, these connectors provide the longevity needed for years of worry-free service.

Using the Cat6 Unshielded Pass-Through RJ45 Connector is efficient and reduces material waste:

- Strip: Use a stripper to remove about 1.5 inches of the Cat6 cable jacket.
- Organize: Straighten the four pairs and arrange them into the T568B or T568A color sequence.

Gold Plating Options FU" / 3µ" / 6µ" / 15µ" / 30µ" / 50µ" Custom Gold Plating	**100% Quality Assurance** Fluke Versiv / DSX Tested, Salt-Spray & ≥750–2000 Mating Cycles
OEM / ODM Customization Custom Mold Tooling, Housing Colors, Cable Lengths & Private Label	**Certifications & Compliance** ISO 9001:2015, RoHS, REACH, CE, UL 94V-0 / UL 94V-2 Rated

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